

# **Russell County**

8/31/2020

### Background Statistics<sup>1</sup>

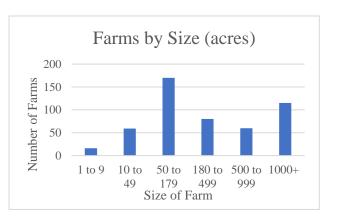
Number of farms: 500 Average size: 985 acres

Land in farms: 492,456 acres

Average value of products sold per farm: \$100,107

Average net cash farm income per farm: \$24,845

1: Data from USDA 2017 Census of Agriculture



# Estimated Economic Contribution of Agriculture and Agriculture Related Sectors to the Russell County Economy

## Methodology

The estimated economic contribution of agriculture and agriculture related sectors was computed using the most recent IMPLAN data available (2018) adjusted for 2020. The IMPLAN modeling system was used to calculate the results of this analysis. The IMPLAN model was constructed so that double counting was avoided. For this report, 20 of the 71 agriculture and agriculture related sectors in Kansas were identified and analyzed to determine their overall contribution to the Russell County economy.

#### Results

These 20 sectors have a total direct output of approximately **\$221.1 million** and account for **680 jobs** in Russell County. Running the model for all 20 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Russell County Economy							
Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output		
Direct Effect	680	12%	\$39,000,000	12%	\$221,100,000		
Indirect Effect	138	2%	\$9,300,000	3%	\$26,400,000		
Induced Effect	45	1%	\$2,900,000	1%	\$5,800,000		
Total Effect	863	15%	\$51,200,000	16%	\$253,300,000		

**NOTE:** Individual effects may not equal the total effect due to rounding.

As shown in the above table, agriculture, food, and food processing sectors support a total of **863 jobs**, or **15%** of the entire workforce in the county. The total final sales of all products in these sectors is approximately **\$253.3 million**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of Gross Regional Product (GRP). Total value added by the 20 agriculture, food, and food processing sectors is approximately \$51.2 million, or 16% of the GRP.

# **Top Ten Sectors by Employment**

Out of the agriculture and agriculture related sectors, beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer with **284 jobs**. This table also illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Russell County.

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	284
Other animal food manufacturing	108
Grain farming	91
All other crop farming	63
Animal production, except cattle and poultry and eggs	40
Farm machinery and equipment manufacturing	40
Wholesale - Other nondurable goods merchant wholesalers	39
Other real estate	23
Landscape and horticultural services	15
Support activities for agriculture and forestry	13

# **Top Ten Sectors by Output**

This table shows how much revenue is generated in other sectors by having a strong agriculture industry, including direct, indirect, and induced effects. The other animal food manufacturing sector is the top contributor, with approximately \$116.3 million to the Russell County economy.

Sector	Total Output
Other animal food manufacturing	\$116,300,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$41,400,000
Grain farming	\$30,200,000
Farm machinery and equipment manufacturing	\$16,200,000
Wholesale - Other nondurable goods merchant wholesalers	\$9,300,000
Animal production, except cattle and poultry and eggs	\$6,300,000
Oilseed farming	\$3,500,000
Other real estate	\$3,300,000
Petroleum refineries	\$2,600,000
All other crop farming	\$2,600,000

#### **All Direct Sectors**

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Russell County economy. IMPLAN sectors are assigned based on North American Industry Classification System (NAICS) codes. Generally, this analysis includes three categories; production, manufacturing/processing, and services. Note that this analysis does not include wholesale or retail sales of final products, or ethanol production.

Sector	Total Output	Total Employment
Other animal food manufacturing	\$116,256,413.36	107.92
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$41,376,103.48	283.58
Grain farming	\$30,157,263.62	90.62
Farm machinery and equipment manufacturing	\$16,179,392.77	39.80
Animal production, except cattle and poultry and eggs	\$6,327,059.43	39.85
Oilseed farming	\$3,484,438.49	2.99
All other crop farming	\$2,552,468.94	63.36
Landscape and horticultural services	\$904,288.98	15.41
Veterinary services	\$731,941.46	7.09
Poultry and egg production	\$678,596.21	0.73
Support activities for agriculture and forestry	\$654,430.09	13.08
Bread and bakery product, except frozen, manufacturing	\$458,144.32	3.84
Other snack food manufacturing	\$310,949.70	0.65
Frozen cakes and other pastries manufacturing	\$301,957.14	3.84
Roasted nuts and peanut butter manufacturing	\$249,489.63	0.64
Breweries	\$162,439.02	0.48
Commercial logging	\$121,716.01	2.63
Commercial hunting and trapping	\$73,941.45	2.81
Vegetable and melon farming	\$47,838.23	0.27
Forestry, forest products, and timber tract production	\$36,941.22	0.62

The following terms are used throughout the results shown in this report:

- **Direct effect**: the contribution from agricultural and food products
- **Indirect effect**: the contribution from farms and agricultural businesses purchasing inputs from supporting industries within the state
- **Induced effect**: the contribution from employees of farms, agricultural businesses, and supporting industries spending their wages on goods and services within the state
- Value added = labor income + indirect business taxes + other property type income
- Gross Regional Product = final demand of households + government expenditures + capital + exports imports institutional sales
- **Output** = intermediate inputs + value added
- **Employment**: full-time/part-time annual average i.e., 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each. A job is neither full-time nor part-time.
- Due to confidentiality policies that exist within several agencies from which IMPLAN collects their data, some sectors in some regions may not have all data available.

For more information, contact the Division of Agricultural Marketing, Advocacy and Outreach Agency Economist 785-564-6726

